

DENR USE ONLY  Paper Report Electronic Data - Email CD (data loaded; Yes / No)

Doc/Event #:

NC DENR

Division of Waste Management - Solid Waste

### Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

**Instructions:**

- Prepare one form for each individually monitored unit.
- Please type or print legibly.
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(l)).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1546 Mail Service Center, Raleigh, NC 27699-1646.

**Solid Waste Monitoring Data Submittal Information**

Name of entity submitting data (laboratory, consultant, facility owner):

[EDD] SUBMITTED BY ENVIRONMENT 1, INC. / TABLES AND DISCUSSION BY QUIBLE & ASSOC, PLC

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: WADDEEN EADUSPhone: 252.261.3300E-mail: WEADUS@QUIBLE.COM

Facility name:

Facility Address:

Facility Permit #

NC Landfill Rule:  
(.0500 or .1600)Actual sampling dates (e.g.,  
October 20-24, 2006)

**CURRIE TUCK  
COUNTY  
LANDFILL**

**216 AIRPORT ROAD  
MAPLE, NC 27956**

**2701**

**.0500**

**06/23/2008**

**Environmental Status: (Check all that apply)**

- Initial/Background Monitoring     Detection Monitoring     Assessment Monitoring     Corrective Action

**Type of data submitted: (Check all that apply)**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Groundwater monitoring data from monitoring wells | <input type="checkbox"/> Methane gas monitoring data            |
| <input type="checkbox"/> Groundwater monitoring data from private water supply wells  | <input type="checkbox"/> Corrective action data (specify) _____ |
| <input type="checkbox"/> Leachate monitoring data                                     | <input type="checkbox"/> Other(specify) _____                   |
| <input checked="" type="checkbox"/> Surface water monitoring data                     |   |

**Notification attached?**

- No. No groundwater or surface water standards were exceeded.
- Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
- Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

**Certification**

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Warren D. Eadus

Agent for Currituck Co.

252.261.3300

Facility Representative Name (Print)

Title

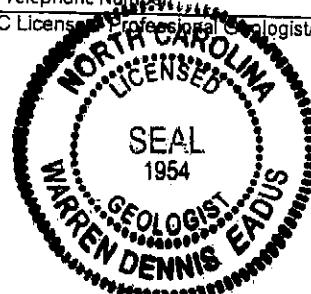
(Area Code) Telephone Number

Signature

7/30/08

Date

Affix NC Licensed Professional Geologist/Engineer Seal here:



# Quible

Quible & Associates, P.C.

ENGINEERING • ENVIRONMENTAL SCIENCES • PLANNING • SURVEYING  
SINCE 1959

P.O. Drawer 870  
Kitty Hawk, NC 27949  
Phone: 252-261-3300  
Fax: 252-261-1260

July 30, 2008

Donald Herndon  
ND DENR-Division of Waste Mgt-Solid Waste Section  
1646 Mail Service Center  
Raleigh, NC 27699-1646



PRINCIPALS  
Sean C. Boyle, P.E.  
Joseph S. Lassiter, C.E.P.  
Eduardo J. Valdivieso, P.E.

ASSOCIATES  
Joseph J. Anlauf, P.E.  
Katherine C. Marchello, P.L.S.

Re: Environmental Reporting Form  
Currituck County MSW Landfill  
Permit #27-01

Mr. Herndon:

Please find enclosed an Environmental Monitoring Reporting Form and associated data and documentation related to the groundwater and surface water sampling activities conducted at the above referenced facility on June 23, 2008 by Environment 1, Incorporated (Environment 1). Quible & Associates, P.C. (Quible) was asked to review the laboratory analytical data and provide the appropriate technical assistance in fulfilling the reporting requirements as required by the Division of Waste Management Solid Waste Section (Division).

Based on the groundwater analytical results reported in the July 22, 2008 Laboratory Analytical Report, the concentrations of benzene reported in the groundwater samples collected from Well #5 (1.50 µg/L) exceed the 2L GQS. In addition, the concentrations of vinyl chloride reported in the groundwater samples collected from Well #5 (1.10 µg/L) exceed the 2L GQS. Concentrations of arsenic reported in the groundwater samples collected from Well #1 (166 µg/L) exceed the 2L GQS. In addition, concentrations of arsenic reported in the groundwater samples collected from Well #6 (24 µg/L) and Well #8 (24 µg/L) exceed the 2B SWS GQS.

A table summarizing the groundwater analytical data for groundwater and surface water samples with detectable concentrations of metals and volatile organic constituents from the last four sampling events has been included with this submission. A copy of the most recent laboratory data and a table entitled; *Table of Values Which Exceed Established Standards And/Or Exceed Reporting Levels*, submitted to Currituck County by Environment 1 has also been included.

Arsenic is a naturally occurring metal, and is readily found in measurable quantities in both groundwater and soils in the coastal plain of North Carolina. Conventional metals analysis (EPA Method 200.8) in groundwater requires acid preservation. The acid preservation dissolves sediments and otherwise insoluble metals suspended in the groundwater sample, elevating the concentrations of dissolved metals in the samples. The turbidity of the samples at the time of preservation is not known or required to be known. Therefore, it is not clear if suspended sediments influence the arsenic concentrations reported in the groundwater samples. The exact cause of the relative increases in arsenic concentrations observed in many of the wells over the last year is not clear but may be attributed to any or all of the factors discussed.

Concentrations of benzene that exceed the 2L GQS have been reported in the groundwater samples collected from Well# 5 over the last three sampling events. Benzene is generally associated with petroleum contaminants. The County maintains several used oil and petroleum waste tanks near the scale house at the Transfer Station. However, these tanks are several hundred feet away from Well #5. The site is open to the general public during normal operating hours and it is possible that benzene contamination reported in Well #5 could be related to negligent dumping of petroleum products or containers of petroleum products.

Vinyl chloride is a major component of PVC production. The cause(s) of the concentrations of vinyl chloride reported in the ground water samples collected from Well #5 are not clear at this time.

The next scheduled sampling event at the Currituck County Landfill is in June of 2008.

Please do not hesitate to contact the undersigned at 252.261.3300, if you have any questions or require any additional information in this matter.

Sincerely,

Quible & Associates, P.C.



Warren Eadus, L.G.

enc As stated

cc file

**Table of Values Which Exceed Established Standards  
And/Or Exceed Reporting Levels**

Facility Name: CUMBERLAND COUNTY LANDFILL

Permit #. 2701

Task ID# 6020

Collection Exceeds Location	Date	Std	Parameter	CAS #	Result, ug/l	NC 2L	NC GWP	NC 2B
						STD **	STD **	SWS **
Well 1 #1	06/23/2008	Y	Arsenite	7440-38-2		166		50
Well 1 #2	06/23/2008		Barium	7440-39-3		100		2000
Well 1 #2	06/23/2008		Chlorobenzene	108-90-7		6.00		50
Well 1 #5	06/23/2008		Barium	7440-39-3		184		2000
Well 1 #5	06/23/2008		Selenium	7782-49-2		18		50
Well 1 #5	06/23/2008	Y	Vinyl Chloride	75-01-4		1.10	0.015	
Well 1 #5	06/23/2008	Y	Benzene	71-43-2		1.50	1	
Well 1 #6	06/23/2008		Arsenic	7440-38-2		24		50
Well 1 #8	06/23/2008		Arsenic	7440-38-2		24		50
Well 1 #8	06/23/2008		Barium	7440-39-3	165	2000		

\* Note: NCBI STD = NCBI Standard.

NCS 212 = NC 212 Ground Water Standard

NC GWP STD = NC Solid Waste Groundwater Protection Standard

NC 2B SWS = NC 2B Surface Water Standard

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**Summary of Groundwater and Surface Water Analytical Data Metals<sup>1</sup>**  
**Currituck County Landfill Permit #27-01**

Sample ID	Date	Well #1	Well #2	Well #3	Well #4	Well #5	Well #6	Well #7	Well #8	Pond	2L GQS <sup>2</sup>	2B SWSS <sup>3</sup>
Arsenic	12/07/06	17	<7.0	<7.0	<7.0	<7.0	14	<7.0	<7.0	<7.0	<7.0	
	06/27/07	<b>61</b>	6.6	4.7	<0.47	3.8	17	1.1	0.8	0.6	50	10
	12/06/07	<b>55</b>	5.9	5.5	1.7	5.7	36	3.1	2.0	<0.47		
	06/23/08	<b>166</b>	5.1	5	0.7	7	24	2.8	<b>24</b>	0.9		
Barium	12/07/06	<60	<60	<60	71	<60	<60	<60	<60	69		
	06/27/07	<b>38.2</b>	121	8.6	43.5	159	26	26.9	51.0	15.3		
	12/06/07	30.3	96.3	8.4	65.3	172	35.8	23.7	162	18.3		
	06/23/08	<b>52.3</b>	100	9.2	48.4	184	29	20.8	165	<b>14.7</b>		
Cadmium	12/07/06	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<b>2*</b>	
	06/27/07	0.3	0.2	<0.06	0.9	<0.06	<0.06	0.1	0.8	0.7		
	12/06/07	0.1	0.2	0.1	1.2	0.1	0.2	0.2	0.8	<0.06		
	06/23/08	0.2	0.2	0.1	0.3	0.1	<0.04	0.1	0.4	0.1		
Total Chromium	12/07/06	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	
	06/27/07	<b>1.9</b>	1.1	0.5	1.5	4.1	0.4	0.9	1.4	0.5	50	50
	12/06/07	1.0	0.3	<0.24	1.5	4.3	<0.24	0.4	1.7	<0.24		
	06/23/08	1.7	0.5	<0.11	0.8	4.1	<0.11	0.2	1.6	<0.11		
Lead	12/07/06	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	8	
	06/27/07	1.4	0.4	<0.07	1.4	<0.07	<0.07	<0.07	1.2	<0.07	15	25
	12/06/07	1.1	2.8	0.3	2.2	0.3	0.2	0.2	1.3	0.3		
	06/23/08	2.8	0.6	0.2	1.8	0.1	0.1	0.1	0.6	0.1		
Mercury	12/07/06	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
	06/27/07	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	<0.04		
	12/06/07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	1.05	
	06/23/08	<b>0.05</b>	<b>0.02</b>	<b>0.04</b>	0.01	<0.01	0.03	<0.01	0.04	0.01	0.01	0.012

**Summary of Groundwater and Surface Water Analytical Data Metals<sup>1</sup>**  
**Currituck County Landfill Permit #27-01**

	12/07/06	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Selenium	06/27/07	<0.35	1.7	0.5	0.5	5.0	0.6	1.1	0.6	<0.35	50
	12/06/07	0.4	3.7	0.6	4.8	11	0.9	4.0	3.6	<0.35	
	06/23/08	1.7	5.3	1	0.6	<b>18</b>	2.5	2.4	5.2	0.5	
Silver	12/07/06	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	0.06
	06/27/07	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	17.5
	12/06/07	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	
	06/23/08	0.1	<0.04	0.1	<0.04	0.1	<0.04	0.1	0.1	<0.04	

Notes on following page.

1. Groundwater and surface water samples collected by Environment 1, Incorporated on behalf of Currituck County. Laboratory Analytical Reports provided by Currituck County.
2. NC DENR Division of Water Quality Title 15A NCAC 2L .0202 Groundwater Quality Standards April 2005.
3. NC DENR Division of Water Quality Title 15A NCAC Subchapter 2B Water Quality Standards for Freshwater Classifications. Surface Water Standards listed are the more stringent of either the aquatic life or human health standard for all Freshwater Classifications.
4. Concentrations in bold type meet or exceed either of the 2L or 2B Standards.
5. Title 15A 2B .0208-Standards for Toxic Substances and Temperature.

**Summary of Groundwater and Surface Water Analytical Data Volatile Organics  
Currituck County Landfill Permit #27-01**

**Summary of Groundwater and Surface Water Analytical Data Volatile Organics  
Currituck County Landfill Permit #27-01**

Sample ID	Date	Well #1	Well #2	Well #3	Well #4	Well #5	Well #6	Well #7	Well #8	Pond	2L GQS	2B SWS
chloromethane	12/07/06	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	T
	06/27/07	<0.18	<0.18	<0.18	<0.18	0.70	<0.18	0.20	<0.18	<0.18	<0.18	
	12/06/07	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	
	06/23/08	<0.18	<0.18	<0.18	<0.18	0.20	<0.18	<0.18	<0.18	<0.18	<0.18	
	12/07/06	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	
	06/27/07	<0.34	<0.34	<0.34	<0.34	0.60	0.50	<0.34	<0.34	<0.34	<0.34	
	12/06/07	<0.34	<0.34	<0.34	<0.34	0.90	<0.34	<0.34	<0.34	<0.34	<0.34	
	06/23/08	<0.34	<0.34	<0.34	<0.34	1.10	0.40	<0.34	<0.34	<0.34	<0.34	
vinyl chloride	12/07/06	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	<50.00	525
	06/27/07	<1.21	<1.21	1.70	1.40	1.70	<1.21	3.20	1.50	2.40	700	
	12/06/07	<1.21	<1.21	<1.21	<1.21	1.30	<1.21	<1.21	<1.21	<1.21	<1.21	
	06/23/08	2.40	3.80	3.00	2.60	7.50	2.50	3.40	4.40	3.80		
	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	
	06/27/07	<0.16	<0.16	<0.16	<0.16	0.20	<0.16	<0.16	<0.16	<0.16	<0.16	
	12/06/07	<0.16	<0.16	<0.16	<0.16	0.40	<0.16	<0.16	<0.16	<0.16	<0.16	
	06/23/08	<0.16	<0.16	<0.16	<0.16	0.20	<0.16	<0.16	<0.16	<0.16	<0.16	
acetone	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	T
	06/27/07	<0.16	<0.16	<0.16	<0.16	0.20	<0.16	<0.16	<0.16	<0.16	<0.16	
	12/06/07	<0.16	<0.16	<0.16	<0.16	0.40	<0.16	<0.16	<0.16	<0.16	<0.16	
	06/23/08	<0.16	<0.16	<0.16	<0.16	0.20	<0.16	<0.16	<0.16	<0.16	<0.16	
	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	
	06/27/07	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
	12/06/07	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
	06/23/08	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
1,1-dichloroethane	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	T
	06/27/07	<0.16	<0.16	<0.16	<0.16	0.20	<0.16	<0.16	<0.16	<0.16	<0.16	
	12/06/07	<0.16	<0.16	<0.16	<0.16	0.40	<0.16	<0.16	<0.16	<0.16	<0.16	
	06/23/08	<0.16	<0.16	<0.16	<0.16	0.20	<0.16	<0.16	<0.16	<0.16	<0.16	
	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	
	06/27/07	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
	12/06/07	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
	06/23/08	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
chloroform	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	T
	06/27/07	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
	12/06/07	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
	06/23/08	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	
	06/27/07	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
	12/06/07	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
	06/23/08	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	

**Summary of Groundwater and Surface Water Analytical Data Volatile Organics**  
**Currituck County Landfill Permit #27-01**

Sample ID	Date	Well #1	Well #2	Well #3	Well #4	Well #5	Well #6	Well #7	Well #8	Pond	2L GQS	2B SWS
toluene	12/07/06	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	
	06/27/07	<0.13	<0.13	<0.13	<0.13	0.20	<0.13	<0.13	<0.13	<0.13	<0.13	
	12/06/07	<0.13	<0.13	<0.13	<0.13	0.20	<0.13	<0.13	<0.13	<0.13	<0.13	
	06/23/08	<0.13	<0.13	<0.13	<0.13	0.30	<0.13	<0.13	<0.13	<0.13	<0.13	

Notes:

1. Groundwater and surface water samples collected by Environment 1, Incorporated on behalf of Currituck County. Laboratory Analytical Reports provided by Currituck County.
2. NC DENR Division of Water Quality Title 15A NCAC 2L .0202 Groundwater Quality Standards April 2005.
3. NC DENR Division of Water Quality Title 15A NCAC Subchapter 2B Water Quality Standards for Freshwater Classifications April 2003. Surface Water Standards listed are the more stringent of either the aquatic life or human health standard for all Freshwater Classifications.
4. Concentrations in bold type meet or exceed either of the 2L or 2B Standards.
5. Title 15A 2B .0208-Standards for Toxic Substances and Temperature.

11  
1,000  
11

# Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE  
GREENVILLE, N.C. 27835-7085

Wastewater ID: 10

PHONE (252) 756-6208  
FAX (252) 756-0633

ID# : 6028

CURRITUCK COUNTY LANDFILL  
ATTN: BRENDA/FRANK BRAY  
PUBLIC WORKS DEPARTMENT  
P.O. BOX 38  
CURRITUCK ,NC 27929

DATE COLLECTED: 06/23/08  
DATE REPORTED : 07/22/08

REVIEWED BY: 

PARAMETERS	MDL	SWSL	Well #1	Well #2	Well #3	Well #4	Well #5	Analysis Date	Analyst	Method Code
PH (field measurement), Units			4.7	6.6	6.0	4.8	6.2	06/23/08	RJH	SM4500HB
Arsenic, ug/l	0.57	10.0	166					07/15/08	CMF	SM3113B
Arsenic, ug/l	0.57	10.0		5.1 J	5 J	0.7 J	7 J	07/03/08	LFJ	EPA200.8
Barium, ug/l	0.11	100.0	52.3 J	100	9.2 J	48.4 J	184	07/03/08	LFJ	EPA200.8
Cadmium, ug/l	0.05	1.0	0.2 J	0.2 J	0.1 J	0.3 J	0.1 J	07/03/08	LFJ	EPA200.8
Total Chromium, ug/l	0.11	10.0	1.7 J	0.5 J	---	0.8 J	4.1 J	07/03/08	LFJ	EPA200.8
Lead, ug/l	0.32	10.0	2.8 J	0.6 J	0.2 J	1.8 J	0.1 J	07/03/08	LFJ	EPA200.8
Mercury, ug/l	0.01	0.20	0.05 J	0.02 J	0.04 J	0.01 J	---	07/03/08	LFJ	EPA200.8
Selenium, ug/l	0.51	10.0	1.7 J	5.3 J	1 J	0.6 J	18	07/03/08	LFJ	EPA200.8
Silver, ug/l	0.04	10.0	0.1 J	---	0.1 J	---	0.1 J	07/03/08	LFJ	EPA200.8
Conductivity (at 25c), uMhos	1.0	1.0	135	1087	196	279	1481	06/23/08	RJH	SM2510B
Temperature, °C			17	17	18	18	18	06/23/08	RJH	SM2550B
Static Water Level, feet			6.88	5.25	5.34	9.62	7.75	06/23/08	RJH	
Well Depth, feet			21.15	18.63	21.34	23.60	20.34	06/23/08	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Laboratory Analyses --- Environmental Consultants

# Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE  
GREENVILLE, N.C. 27835-7085

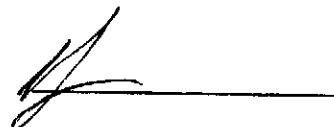
Wastewater ID: 10

PHONE (252) 756-6208  
FAX (252) 756-0633

ID#: 6028

CURRITUCK COUNTY LANDFILL  
ATTN: BRENDA/FRANK BRAY  
PUBLIC WORKS DEPARTMENT  
P.O. BOX 38  
CURRITUCK ,NC 27929

DATE COLLECTED: 06/23/08  
DATE REPORTED : 07/22/08

REVIEWED BY: 

PARAMETERS	MDL	SWSL	Well #6	Well #7	Well #8	Pond	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.5	6.2	6.4	7.9	06/23/08	RJH	SM4500HB
Arsenic, ug/l	0.07	10.0	24	2.8 J	24	0.9 J	07/03/08	LFJ	EPA200.8
Barium, ug/l	0.11	100.0	29 J	20.8 J	165	14.7 J	07/03/08	LFJ	EPA200.8
Cadmium, ug/l	0.04	1.0	--- U	0.1 J	0.4 J	0.1 J	07/03/08	LFJ	EPA200.8
Total Chromium, ug/l	0.11	10.0	--- U	0.2 J	1.6 J	--- U	07/03/08	LFJ	EPA200.8
Lead, ug/l	0.04	10.0	0.1 J	0.1 J	0.6 J	0.1 J	07/03/08	LFJ	EPA200.8
Mercury, ug/l	0.01	0.20	0.03 J	--- U	0.04 J	0.01 J	07/03/08	LFJ	EPA200.8
Selenium, ug/l	0.14	10.0	2.5 J	2.4 J	5.2 J	0.5 J	07/03/08	LFJ	EPA200.8
Silver, ug/l	0.04	10.0	--- U	0.1 J	0.1 J	--- U	07/03/08	LFJ	EPA200.8
Conductivity (at 25c), uMhos	1.0	1.0	183	408	1153	127	06/23/08	RJH	SM2510B
Temperature, °C			18	20	16	28	06/23/08	RJH	SM2550B
Static Water Level, feet			5.16	7.51	5.17		06/23/08	RJH	
Well Depth, feet			20.92	20.40	20.88		06/23/08	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

# Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE  
GREENVILLE, N.C. 27835-7085

REPORT NUMBER: ID# 10

PHONE (252) 756-6208  
FAX (252) 756-0633

CLIENT: CURRITUCK COUNTY LANDFILL  
ATTN: BRENDA/FRANK BRAY  
PUBLIC WORKS DEPARTMENT  
P.O. BOX 38  
CURRITUCK, NC 27929

REVIEWED BY:

CLIENT ID: 6028

ANALYST: MAO  
DATE COLLECTED: 06/23/08 Page: 1  
DATE ANALYZED: 06/26/08  
DATE REPORTED: 07/22/08

## VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Well #1	Well #2	Well #3	Well #4	Well #5
1. Chloromethane	0.18	1.0	--- U	--- U	--- U	--- U	0.20 J
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U	--- U	1.10
3. Bromomethane	0.26	10.0	--- U				
4. Chloroethane	0.29	10.0	--- U	--- U	--- U	--- U	0.50 J
5. Trichlorofluoromethane	0.13	1.0	--- U				
6. 1,1-Dichloroethane	0.14	5.0	--- U				
7. Acetone	1.21	100.0	2.40 J	3.80 J	3.00 J	2.60 J	7.50 J
8. Iodomethane	0.12	10.0	--- U				
9. Carbon Disulfide	0.14	100.0	--- U				
10. Methylene Chloride	0.14	1.0	--- U				
11. trans-1,2-Dichloroethene	0.13	5.0	--- U				
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	--- U	--- U	0.20 J
13. Vinyl Acetate	0.20	50.0	--- U				
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U				
15. 2-Butanone	0.85	100.0	1.50 J	2.30 J	1.50 J	1.60 J	4.40 J
16. Bromochloromethane	0.11	3.0	--- U				
17. Chloroform	0.13	5.0	--- U				
18. 1,1,1-Trichloroethane	0.11	1.0	--- U				
19. Carbon Tetrachloride	0.13	1.0	--- U				
20. Benzene	0.16	1.0	--- U	0.50 J	--- U	--- U	1.50
21. 1,2-Dichloroethane	0.12	1.0	--- U				
22. Trichloroethane	0.13	1.0	--- U				
23. 1,2-Dichloropropane	0.17	1.0	--- U				
24. Bromodichloromethane	0.13	1.0	--- U				
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U				
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U				
27. Toluene	0.13	1.0	--- U	--- U	--- U	--- U	0.30 J
28. trans-1,3-Dichloropropene	0.14	1.0	--- U				
29. 1,1,2-Trichloroethane	0.20	1.0	--- U				
30. Tetrachloroethene	0.16	1.0	--- U				
31. 2-Hexanone	1.00	50.0	--- U				
32. Dibromochloromethane	0.14	3.0	--- U				
33. 1,2-Dibromoethane	0.13	1.0	--- U				
34. Chlorobenzene	0.13	3.0	--- U	6.00	--- U	--- U	1.30 J
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U				
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U	--- U	0.40 J
37. Xylenes	0.48	5.0	--- U				
38. Dibromomethane	0.17	10.0	--- U				
39. Styrene	0.16	1.0	--- U				
40. Bromoform	0.11	3.0	--- U				
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U				
42. 1,2,3-Trichloropropane	0.06	1.0	--- U				
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	0.30 J	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U				
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U				
46. Acrylonitrile	1.49	200.0	--- U				
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- U				

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

# Environment 1, Incorporated

Westminster, NC 27093

P.O. BOX 7085, 114 OAKMONT DRIVE  
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208  
FAX (252) 756-0633

CLIENT: CURRITUCK COUNTY LANDFILL  
ATTN: BRENDA/FRANK BRAY  
PUBLIC WORKS DEPARTMENT  
P.O. BOX 38  
CURRITUCK, NC 27929

REVIEWED BY:

CLIENT ID: 6028

ANALYST: MAO  
DATE COLLECTED: 06/23/08  
DATE ANALYZED: 06/26/08  
DATE REPORTED: 07/22/08

Page: 2

## VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWL	Well #6	Well #7	Well #8	Pond
1. Chloromethane	0.18	1.0	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.34	1.0	0.40 J	--- U	--- U	--- U
3. Bromomethane	0.26	10.0	--- U	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	0.70 J	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U
7. Acetone	1.21	100.0	2.50 J	3.40 J	4.40 J	3.80 J
8. Iodomethane	0.12	10.0	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	0.20 J	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethane	0.14	5.0	0.40 J	--- U	--- U	--- U
15. 2-Butanone	0.85	100.0	1.40 J	2.20 J	2.60 J	2.00 J
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U	--- U
17. Chloroform	0.13	5.0	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U	--- U
20. Benzene	0.16	1.0	0.70 J	--- U	0.80 J	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pantanone	0.68	100.0	--- U	--- U	--- U	--- U
27. Toluene	0.13	1.0	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	1.00 J	--- U
34. Chlorobenzene	0.13	3.0	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	--- U	0.30 J	--- U
44. 1,3-Dichlorobenzene	0.13	5.0	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- U	--- U	--- U	--- U

J = Between MDL and SWL, U = Below ALL Quantitation Limits.

## CHAIN OF CUSTODY RECORD

Page 1 of 1

Phone (252) 756-6208 • Fax (252) 756-0633

CLIENT: 6028

Week: 23

CURRITUCK COUNTY LANDFILL  
 ATTN: BRENDAN FRANK BRAY  
 PUBLIC WORKS DEPARTMENT  
 P.O. BOX 38  
 CURRITUCK NC 27929

(252) 252-2769

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2	PARAMETERS	CLASSIFICATION		
	DATE	TIME														CHLORINE	UV
Well #1	06/23/05	11:30	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17	5	<input checked="" type="checkbox"/>										
Well #2	06/23/05	11:15	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17	4	<input checked="" type="checkbox"/>										
Well #3	06/23/05	11:45	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	4	<input checked="" type="checkbox"/>										
Well #4	06/23/05	10:40	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	4	<input checked="" type="checkbox"/>										
Well #5	06/23/05	10:25	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	4	<input checked="" type="checkbox"/>										
Well #6	06/23/05	11:55	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	4	<input checked="" type="checkbox"/>										
Well #7	06/23/05	12:05	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20	4	<input checked="" type="checkbox"/>										
Well #8	06/23/05	12:55	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16	4	<input checked="" type="checkbox"/>										
Pond	06/23/05	12:40	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28	4	<input checked="" type="checkbox"/>										
RELINQUISHED BY (SIG.) (SAMPLER)	DATETIME	RECEIVED BY (SIG.)	DATETIME	COMMENTS:	SAMPLES RECEIVED IN LAB AT 6 - 7 °C												
RELINQUISHED BY (SIG.)	DATETIME	RECEIVED BY (SIG.)	DATETIME														
RELINQUISHED BY (SIG.)	DATETIME	RECEIVED BY (SIG.)	DATETIME														

Instructions for completing this form are on the reverse side.

Sampler must place a "G" for composite sample or a "C" for

Grab sample in the blocks above for each parameter requested.

FORM #5

Nº 166123